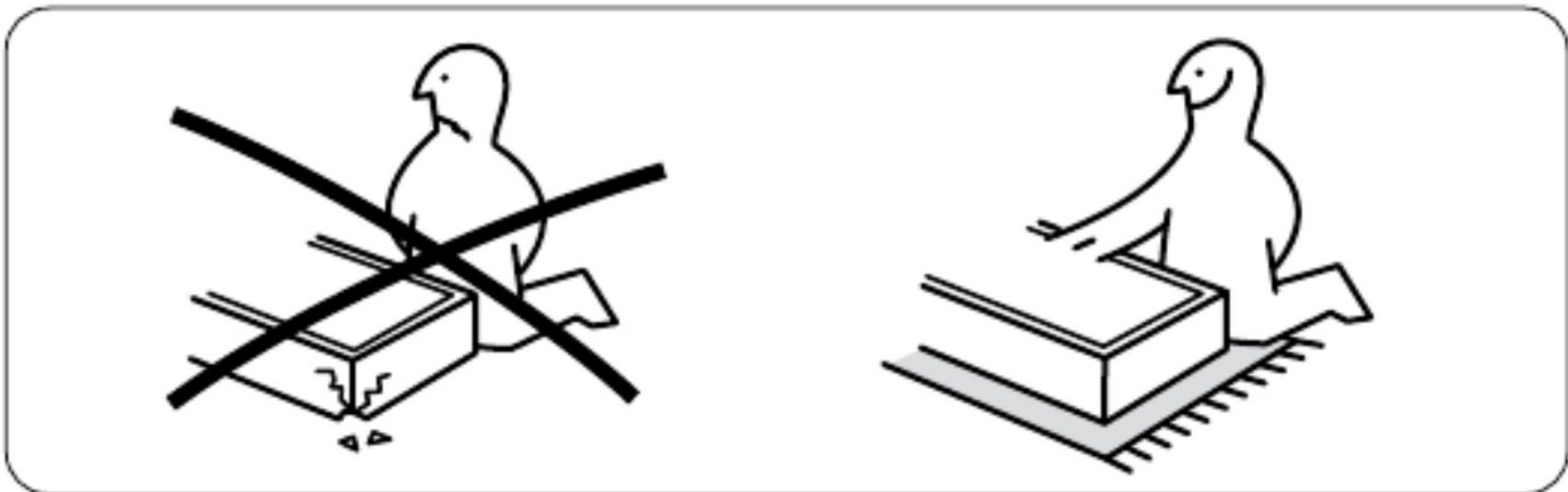
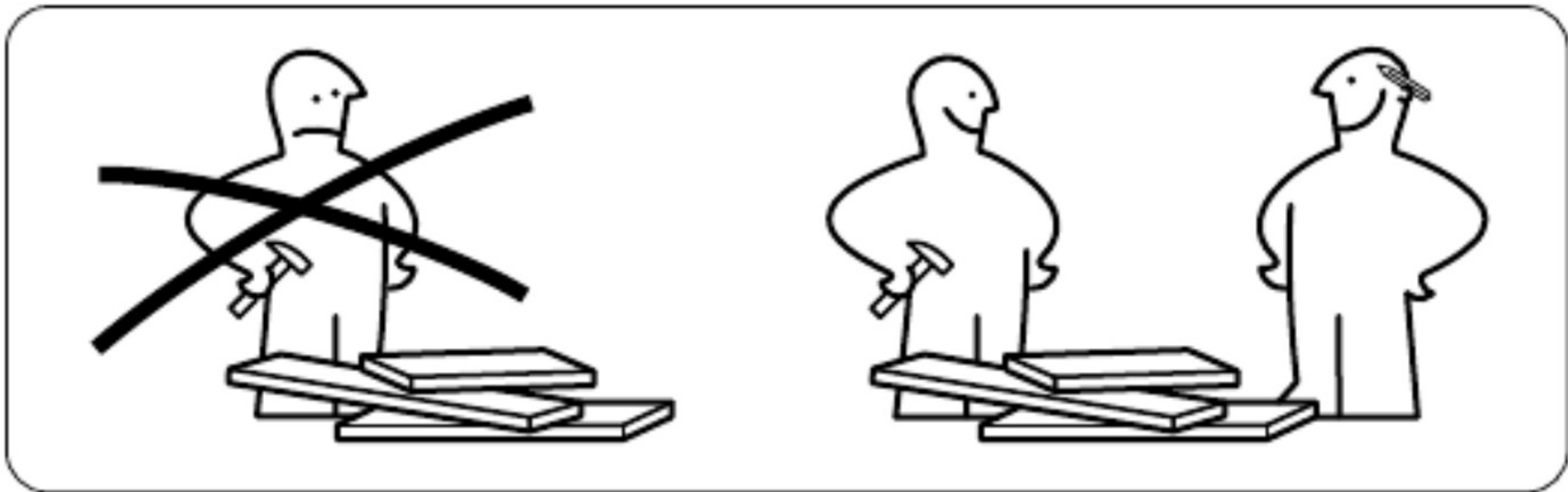


Information design: a UX perspective

Bożena Jaskowska
Pedagogical University of Krakow. Institute of Information Science

07.12.2022 r.







Prasa we Lwowie
w latach
1918-1945

NOWOŚĆ w Serii Historycznej
Prasa we Lwowie w latach 1918-1945

cena regularna 39 zł,
w przedsprzedaży 30 zł


**Nowy sklep**

Sprawdź nasze oferty >

**Edukacja w SBP**

Konferencje i warsztaty >

Dla członków SBP >

Zostań członkiem SBP >



16.11.2022

Indywidualne systemy zarządzania informacją jako sposób na walkę z przeciążeniem informacyjnym | 29 listopada 2022

Zapraszamy na wykład dr Anny Matyszek z Uniwersytetu Śląskiego w Katowicach **więcej >**



25.10.2022

Inspiracje dla bibliotek

ARTYKUŁ SPONSOROWANY

Na wstępie chciałabym zaprosić bibliotekarki i bibliotekarzy do udziału w VII Forum Edukacji Dorosłych, które odbędzie...**więcej >**



24.03.2022

Apel Ukraińskiego Stowarzyszenia Bibliotek do bibliotekarzy świata

**BIBLIOGRAFIA
FONOGRAFII
POLSKIEJ**

**?zukam
książki.pl**

WYSZUKAJ WYBIERZ ZAREZERWUJ W BIBLIOTECE



Pokazy filmowe w Twojej bibliotece

Partner wspierający SBP



Partner wspierający SBP



Pedagogiczna Biblioteka Wojewódzka
im. Komisji Edukacji Narodowej
w Warszawie

Partner wspierający SBP



ZAPRASZAMY



aut. Blank Studio





9-5


PN 96	PN 1992.45
to	to
PN 1992.4	PN 1995 .G68
9th Floor A-4	9th Floor A-5

5-10

PN 1995 .G7	PN 1998 .D
to	to
PN 1998 .C	PN 2287 .T
9th Floor A-6	9th Floor A-7

5-10

PN 2287 .V	PN 4781 .R
to	to
PN 4781 .P	PN 6081.2
9th Floor A-8	9th Floor A-9



At least
133 people
have died since
the beginning
of protests
in Iran

*1 line =
1 person*

*Source: Iran Human Rights
October 2, 2022*

Information design

- Information design
- Information architecture
- Communication design

Information design

- Presenting information through graphics – graphics as a tool for organizing information
 - color
 - composition
 - format
 - movement

Information design

- Visualization of statistical data
- Orientation systems
- Pictogram systems
- Maps
- Information and text visualization

Communication design

- Constantly attempting to build social relationships using usable graphic and informational forms
- social and media communication issues
- identification of companies and institutions
- graphic design
- packaging design
- ...

Information architecture

- The structural design of shared information environments
- The synthesis of organization, labeling, search, and navigation systems within digital, physical, and cross-channel ecosystems
- The art and science of shaping information products and experiences to support usability, findability, and understanding
- An emerging discipline and community of practice focused on bringing principles of design and architecture to the digital landscape

Information architecture

- Organizing
 - organizational structures
 - controlled vocabulary and thesaurus
- Navigating (making it easier to find your way to information)
 - Where am I? Where have I been? Where can I go? How do I accomplish a goal and solve a problem?
- Labeling (naming)
 - What does it mean and what does it inform me about? What is hidden "inside"?
- Searching

Information architecture and user

- What are my information needs and the problem to be solved?
- Which tools will solve my problem?
- What do I need to do and what steps do I need to take to achieve my goal?
- Will it be quick, easy and understandable?
- Will it be fun and enjoyable?
- That I will want to do it again?

Information architecture

- Design, research, evaluation of web services and information spaces, in particular
 - organization of information
 - planning user paths
 - building visual communication systems
- in order to provide users with access to information in a useful, attractive and friendly way

- When did design take an interest in the user?

The manuscript page contains a central anatomical drawing of a human eye, showing the iris, pupil, and surrounding structures. Above the eye is a diagram of a mechanical device with a curved top and a rectangular base. To the right of the eye is a circular diagram with internal lines. Below the eye are several smaller diagrams, including a gear mechanism, a vertical shaft, and various rectangular frames. The page is filled with handwritten text in a historical script, likely Polish or Latin, arranged in columns around the drawings. The text appears to be technical or scientific in nature, possibly describing the mechanics of the eye or the devices shown. The paper is aged and shows some wear and tear.

"Simplicity is the height of sophistication"

Leonardo da Vinci

- Henry Ford - looking for ways to improve human (worker) interaction with the production machine
- Winslow Taylor develops the Toyota Production System recognized as the first human-centered production system that focuses on the interaction between man and technology
- TOYOTA → a symbol of humanizing the manufacturing process

Designing for pleasure

- Amusement parks
- „Do what you do so well that they will want to see it again and bring their friends”



Paul Fitts and Alphonse Chapanis

„designer error”



B-17 redesign was the first time it occurred
to anyone that

we should design machines to accommodate human
behavior instead of retraining human behavior to fit
machines

Henry Dreufuss

„Designing for people” (1955)



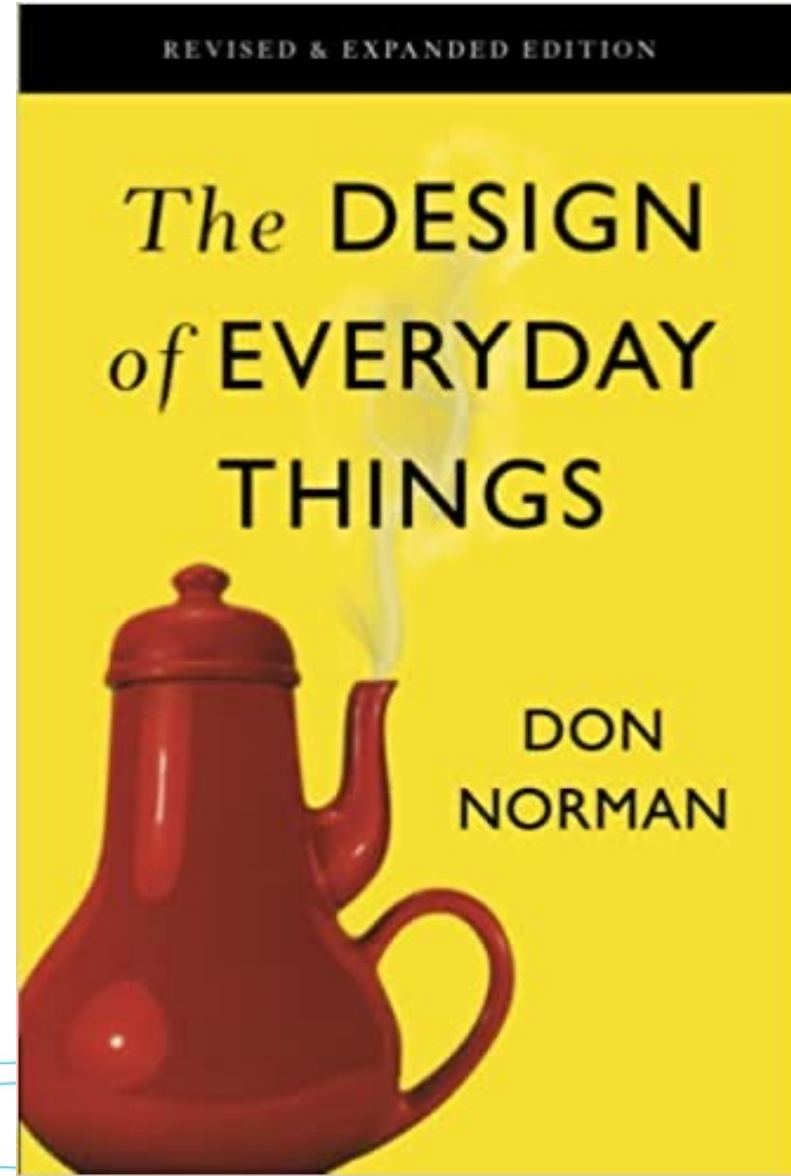
Termostat Honeywell (1953)



Phone Bell Model 500 (1949)

Donald Norman

- „User experience encompasses all aspects of the end-user's interaction with the company, its services, and its products”



What is user experience?

- A person's perceptions and responses that result from the use and/or anticipated use of a product, system or service (ISO 9241-210)
- UX is explained by three product features:
 - usability
 - attractiveness
 - positive emotions











- UX is not pretty pages
- UX is not user interface
- UX is not wireframe

- UX is user experience and emotions

How to design the user experience?

- In-depth understanding of user needs, behaviors, habits and contexts (research)
- Engaging the user from the early design stages
- Creating a sense of shared ownership of the product/service
- Referencing the overall experience
- Leveraging intuition and the potential of teamwork
- Competitor analysis and benchmarks

UX and information

- Information scent
- Emotions in information behavior
- Navigation and search patterns
- Metaphors
- UX laws
- Accessibility

Information scent

- Peter Pirolli and Stuart Card (XEROX PARC) - 1990s.
- Information foraging - theory inspired by evolution and animal behavior
- Human information-seeking patterns are similar to biological and anthropological theories of food seeking
- We search for information the way the first humans searched for food - we want to get as much valuable information as possible at the lowest possible cost

ANIMAL FORAGING

INFORMATION FORAGING



Food

Goal

Information



A site containing one or more potential sources of food

Patch

A website (or other source of information)



Search for food

Forage

Search for information



The animal's assessment of how likely it is that a given patch will provide food

Scent

How promising a potential source of information appears to the user



The totality of food types that an animal may consider in order to satisfy hunger

Diet

The totality of the information sources that a user may consider in order to satisfy an information need



(Raluca Budiu, NN Group, 2019)

Information scent

- A strong smell means approaching prey
- A weakening scent is a signal to the user that they have strayed from the right course and the browser's "back" button should be used
- Too many mixed up strong clues can create a feeling of confusion for the user and so prompt them to close the page
- A well-labeled and inviting path is important, i.e., the detail of information increases with each step

Designing with the information scent (1)

- A strong lead at the beginning of the user's interaction with the system is important
- Isolate a small number of highly visible, distinct paths
- Limiting the choices on the main menu or home page to a few strong, general categories makes it easier to focus the user's attention

Designing with the information scent (2)

- When the user is approaching the destination, other "smells" should be limited so as not to distract him and allow him to complete the process
- Understandable and literal link names are important
- The content of the link should explain what it leads to
- Do not use marketing slogans and terminology unfamiliar to the user

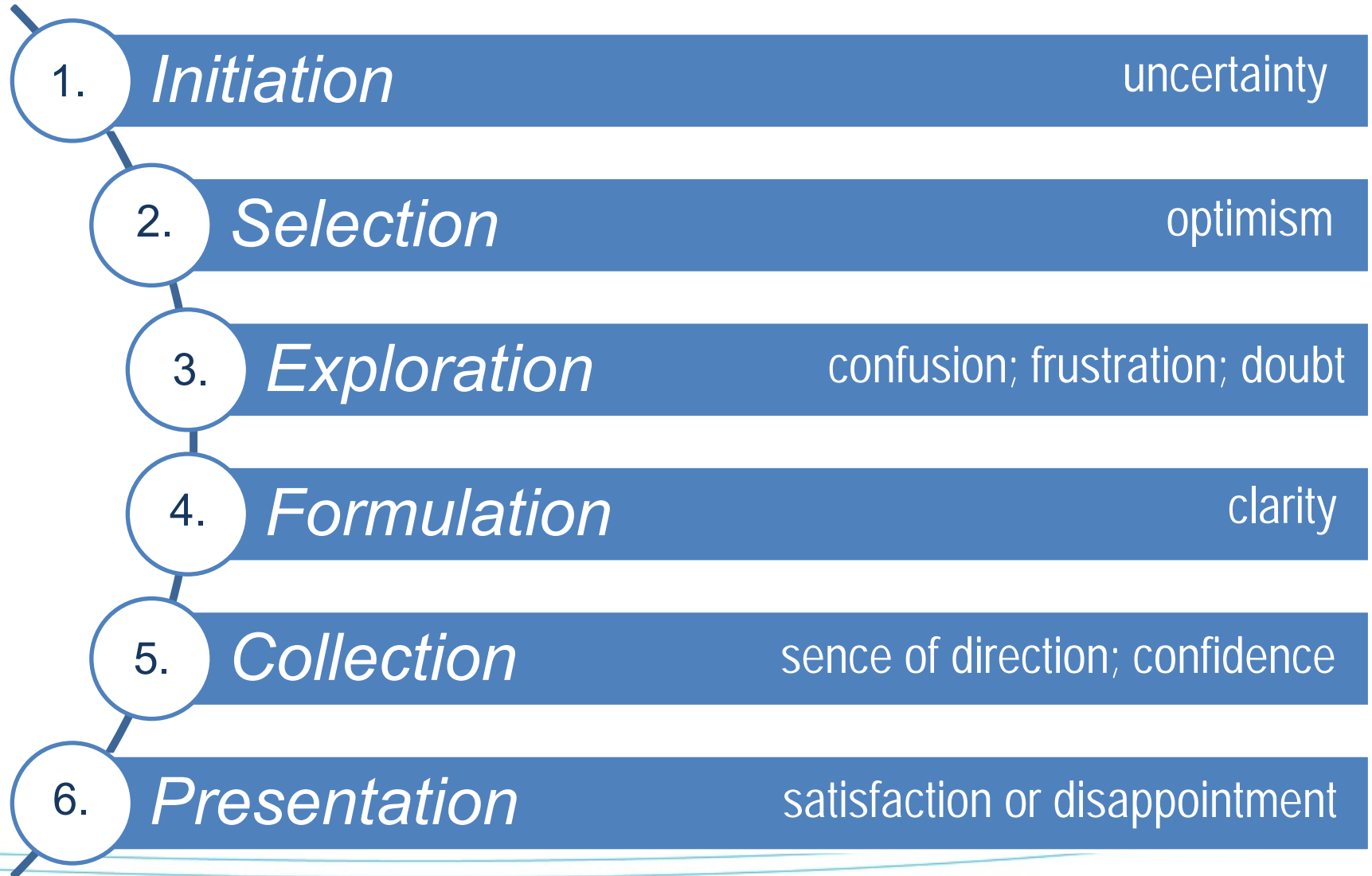
Designing with the information scent (3)

- Provide the user with clues at every step so that they don't lose the scent
- Make the number of clicks or steps less important than a well-marked path
- If there is a strong lead to a place, and the information sought is not there, the user is likely to conclude that it is nowhere else and leave the site
- If the information is elsewhere on the site, use cross-linking

Information and emotions

- Individual conditioning (cognitive and affective)
- Information problem
- Type of information
- Context (environment, demographics)
- Mental / psychological conditions

The model of the Information Search Process (Carol C.Kuhlthau)





Fot. E. Ventur

- These emotions should be known and understood (research)
- When designing, the sense of certainty should be increased and sustained by, among other things:
 - naming
 - ordering
 - appearance

„Don't make me think!”

(Steve Krug)

Search patterns

- Reflection of established behaviors, activated more or less consciously in the course of information retrieval
- Patterns of behavior revealed, for example, on the basis of system logs
- Patterns become established under the influence of many experiences through repeated repetition
- Individual patterns (characteristic of individuals) and patterns concerning collectivities

Searching is deciding

- Choices made before searching (getting results)
 - choice of system
 - choice of strategy
 - choice of terms
 - category selection
- Choices made after searching (displaying results)
 - selection of descriptions
 - selection of information from the content of documents
 - decision to complete / continue the search process

Theories of decision-making

- Decision-making is the act of consciously choosing one of at least two possible solutions to a problem
- Bounded rationality model – Herbert Simon (mid-20th century)
 - people make decisions within certain limitations
 - replacing the search for the best solution (known as maximizing) with the search for a solution that is good enough, not necessarily the best (known as satisficing)

Theories of information-seeking behavior

- The principle of least effort
- The theory of rational choice
- On the one hand, the user strives for a minimum of effort, on the other - for maximum effect
- The user tries to make a choice that will bring him closer to the information he is looking for, and that is acceptable in terms of the time and commitment required

Metaphors in design

- Metaphors are like better instruction manuals - they let us know how something works without having to explain it in detail
- Metaphors transform something foreign and incomprehensible into something accessible and natural
- Metaphors change, evolve, new ones appear

Metaphors and IA

- Websites as:
 - shopping mall
 - marketplace
 - library
 - jackknife
- Affordances
 - the quality or property of an object that defines its possible uses or makes clear how it can or should be used
- Icons

UX laws

- Hick's law
- Miller's law
- Jakob's law
- Three click rule

Hick's law

- The time it takes to make a decision increases with the number and complexity of choices
- Minimize choices when response times are critical to increase decision time
- Break complex tasks into smaller steps in order to decrease cognitive load
- Avoid overwhelming users by highlighting recommended options

Miller's law

- The average person can only keep 7 (plus or minus 2) items in their working memory
- Don't use the "magical number seven" to justify unnecessary design limitations
- Organize content into smaller chunks to help users process, understand, and memorize easily

Jakob's law

- Users spend most of their time on other sites. This means that users prefer your site to work the same way as all the other sites they already know
- Users will transfer expectations they have built around one familiar product to another that appears similar
- By leveraging existing mental models, we can create superior user experiences in which the users can focus on their tasks rather than on learning new models

Three click rule

- Unofficial web design rule formulated by Jeffrey Zeldman
- User of a website should be able to find any information with no more than three mouse clicks
- It is based on the belief that users of a site will become frustrated and often leave if they cannot find the information within the three clicks

UX in the design process

- Strategy
 - what are the business objectives and user needs
- Scope
 - transformation of strategy into functional requirements
- Structure and wireframe
 - information architecture; suggestions for interactions - navigation
- Surface
 - visual layer

PERSUASION

POSITIVE
EMOTIONS

USABILITY

RELIABILITY

FUNCTIONALITY

UX PYRAMID

Empathize

- One of the stages in Design Thinking
- Focusing on the user
- In-depth understanding of his conscious and unconscious needs
- Getting into the "skin", "shoes" of the user
- Workshop and team work

- RESEARCH

Why we should survey users?

- Implemented solutions are based on facts, not hunches
- Adaptation of the project (system) to the needs of users (not developers)
- In-depth understanding of the needs of a specific audience
- Better cooperation within the project/evaluation/development team

What can we research?

- DECLARATIONS - the user says explicitly what they need/experience
- BEHAVIOUR - these are data based on the researcher's observation of the user (e.g. on the street, in HotJar)
- PHYSIOLOGY - body reactions to stimuli (eye movements, brain tests, body temperature)

„If I had asked people what they wanted, they would have said faster horses”

(Henry Ford)

„Customers don't know what they want
until we've shown them”

(Steve Jobs)

User research

- Qualitative
 - How? Why?
 - Focused on subjective user experience
- Quantitative
 - What, how many? Where? How often?
 - Focused on an objective picture of a fragment of reality
- Mixed

Qualitative user research methods

- In-depth interview (IDI)
- Ethnography research: user observations and interview
- Focus groups
- Diary studies
- Usability testing + think aloud protocol
- Heatmaps
- Card sorting

Quantitative user research methods

- Surveys or questionnaires
- Quantitative usability testing
- A/B testing
- Web analytics
- Clicktracking
- Card sorting

Research and what's next?

- Analysis
- Interpretation
- Modeling
 - Personas
 - Empathy maps
 - User scenarios
 - User journey map
 - Diagrams, flows, matrices
- Understanding
- Implementation of solutions

„Supposing is good,
but finding out is better”

(Mark Twain)

UX in the library

New Column Launch: The User Experience

by [Aaron Schmidt](#)
Jan 15, 2010 | Filed in [Design](#)



„Library Journal”, 2010

The first (?) in the world UX librarian

The Ubiquitous Librarian (Brian Mathews)

In the pursuit of user-sensitive librarianship

[Home](#) [Archives](#) [Profile](#) [Subscribe](#)

[« CeLIBration 2007 – recap \(Diddy ain't got nothin' on us\) | Main | Incentive-based Answers »](#)

September 02, 2007

→ Shifting My Focus – the user experience

As of yesterday I have a new title: User Experience Librarian. This seems to be a natural evolution for me with an emphasis on assessment and communications in the widest terms imaginable.

Essentially, my job now is to [study users](#) and to make recommendations to library admin and department heads. I'll also work with others to develop targeted communication strategies and to do a little brand-work. The biggest challenge will be getting all departments/units to trust me—you say the word *assessment* and people freak out.

That being said, we'll be looking for a new librarian soon to fill my former position. Atlanta is nice, seriously it is. GT is a top five engineering school, and a top 10 public university. The Library has a third building "in the works," is a member of ARL, and recently received ACRL's Excellence Award. We're well suited for ambitious entrepreneurial types because we're given a lot of freedom to experiment. We also have competitive Athletics programs. Something to think about.



Search

Search



About

Updates

UX librarianship

- User-oriented thinking
- Activity closely grounded in research (quantitative and qualitative)
- Involves online and real-world library environments
- More concerned with usability testing than product/service design
- Basic responsibilities of a UX librarian:
 - user research
 - usability testing
 - evaluation of library space
 - evaluation of service quality

My role is looking at the big picture and then to help design a better overall experience for our users

My job now is to study users and to make recommendations to library admin and department heads. I'll also work with others to develop targeted communication strategies and to do a little brand-work. The biggest challenge will be getting all departments/units to trust me - you say the word assessment and people freak out

(Brian Mathews, UX Librarian w Georgia Tech Library)

I would describe a “UX Librarian” as someone whose primary job responsibilities focus on observing and analyzing usage patterns, customer preferences, and emerging trends, then synthesizing that information into concrete recommendations for changes, improvements, and innovations in the provision of library services and resources, and in the design and features of library spaces and interfaces

(Courtney Greene McDonald, 2018)

Librarian who works to ensure that our systems, spaces, services, and resources help people work in the best ways for them, by gathering evidence and creating compelling narratives and processes to drive change

(Kelly Dagan, 2018)

„To find ideas, find problems.
To find problems, talk to people”
(Julie Zhou)

Questions?

Thank you for your attention

Bożena Jaskowska

bozena.jaskowska@up.krakow.pl